

Date: Friday, 9/14/2007 2:01:51 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : CROSSTUBE EXTRUSION (206L)
Job Number : 34685	
Estimate Number : 10027	
P.O. Number : N/A	Part Number : D6004115
This Issue : 9/14/2007 S.O. No. : N/A	Drawing Number : D6004 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : RMA	Drawing Revision : A
Previous Run : 32305	Material : N/A
Written By : <u>[Signature]</u>	Due Date : 1/30/2008 Qty: 36 Um: Each
Checked & Approved By : <u>[Signature]</u>	
Comment : Est Rev: 00.12.15 Added: Issue P/O EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O

4611

C207/09/18

a) Extrude as per Dwg D6004

b) Material: 7075-T6/T6511 (WWW-T-700/7 or QQ-A-225/9

or QQ-A-200/11) seamless aluminum tube

c) Minimum ultimate tensile strength = 77 ksi

d) Minimum tensile yield strength = 66 ksi

e) Material certification required

(36)

2.0	D6004115P	Crosstube material
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 36.0000 Each(s)

Crosstube material

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

8/01/03 (39)

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D6004

08/01/06 (435)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: ☒ Yes ☐ No DQA: ☒ Date: 08/04/18
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 9/14/2007 2:01:51 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: CROSSTUBE EXTRUSION (206L)

Job Number: 34685

Part Number: D6004115

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coats as per QSI 005 4.1

u/g ✓

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: MAT-24

J.L 08/01/17

7.0

QC21

FINAL INSPECTION/W/O RELEASE



(39)

Comment: FINAL INSPECTION/W/O RELEASE

08/01/18

Job Completion



mini 2008/1/16
u

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

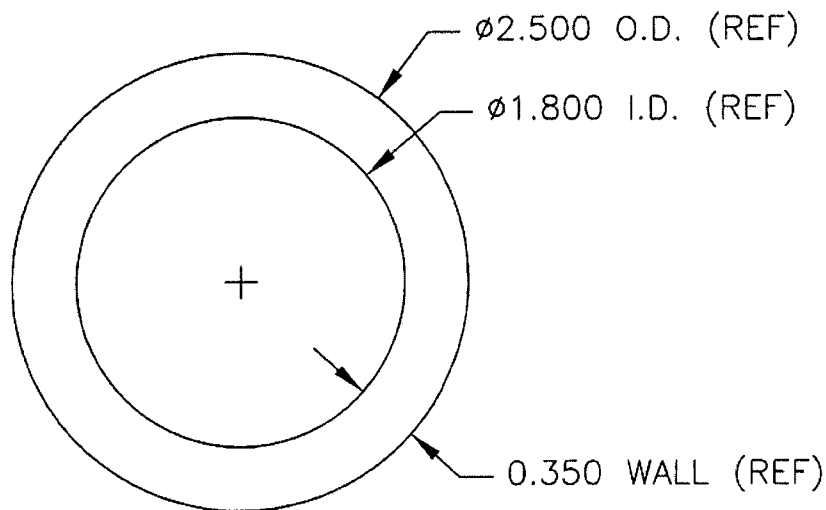
NOTE: Date & initial all entries



DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D6004	REV. A SHEET 1 OF 1
DATE 00.11.22		TITLE CROSSTUBE MATERIAL	SCALE 1:1
A	00.11.22	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
00.11.24



NOTES

- 1) D6004-XXX CROSSTUBE
LENGTH

WHERE XXX IS LENGTH IN INCHES
EG. 115" LONG TUBE: D6004-115

- 2) MATERIAL: 2.500 OD x 0.350 WALL 7075-T6/T6511 (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11) SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi
MINIMUM YIELD TENSILE STRENGTH = 66 ksi
- 3) TOLERANCES ARE PER ASTM B210 AS FOLLOWS:
O.D.: ± 0.006 MEAN (± 0.012 INCLUDING OVALITY)
WALL: ± 0.015 MEAN (± 0.035 INCLUDING ECCENTRICITY)
LENGTH: XXX $+0.125/-0.000$
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
- 4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

SHOP COPY
RETURN TO
ENGINEERING
IN CONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 34685

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BA TUBES LIMITED

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Telephone (01527) 484500, Facsimile (01527) 484501

Approved Certificate According to EN10204:2004 3

For all Customer and 3rd Party approvals
visit www.batubes.com

No. C7157

Customer

DART AEROSPACE LIMITED
1270 ABERDEEN STREET
HAWKESBURY
ONTARIO
CANADA

K6A 1K7

Size / Description

SEAMLESS DRAWN TUBE 2.5 INS O/D 0.35 INS W/T 7075 Alloy
Length - 115.08 inches

Your Order No PO00004611
Your Part No D6004-115P
Our Order No 94945/2
Packing Note No 151441
Date 30/11/07
Packages 1 CASE

Specification
7075 T6
WW-T-700/7B

Other Tests Passed

Length - 115.08 inches						Chemical Analysis %													
No of Pieces	Nett Weight Lbs	Tensile Test				Heat or Cast No	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Zr			Ti	
		Test No	0.2% Proof Stress KSI	Tensile Strength KSI	% Elongation 2in														
18	496	331212 LO	66.1	77.3	14	2N267	.09	.26	1.53	.04	2.58	.19	.01	5.85	.01			.0	
21	580	331214 LO	67.9	78.2	13	2N267	.09	.26	1.53	.04	2.58	.19	.01	5.85	.01			.0	
3																			

Remarks

CASE NO.12976

ALLOY MELTED IN THE UNITED KINGDOM

Authorised Inspection Representative



Mr Terry Layton For and on behalf of BA Tubes

Registered in England No. 3981395
Registered Office: The Victoria, 160-182 Harbour City
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VAT Registration No. GB 668 2142 26



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